

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

Our Docket No.: **I69.12-0592**

Date: **July 31, 2003**

First Named Inventor: **Huazhou Lou et al.**

Title: **DYNAMIC MEASUREMENT OF HEAD MEDIA SPACING  
MODULATION**

Express Mail No.: **EV 302259992 US**

**APPLICATION ELEMENTS**

**ADDRESS TO: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**

1. ☒ Fee Calculation Sheet  
(Submit an original and a duplicate for fee processing)

2. ☐ Applicant claims small entity status

3. ☒ Specification Total Pages **[14]**  
- Descriptive title of the invention  
- Cross References to Related Applications  
- Statement Regarding Fed. Sponsored R&D  
- Reference to Microfiche Appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claims  
- Abstract of the Disclosure

4. ☒ Drawings (35 U.S.C. 113) Total Sheets **[8]**

5. ☒ Oath or Declaration Total Pages **[2]**

a. ☒ Newly Executed (original or copy)  
b. ☐ Copy from a prior application (37 C.F.R.  
1.63(d) - for continuation/divisional with Box 18  
completed)

**[Mark Box 5 below]**

I. ☐ **DELETION OF INVENTOR(S)**

Signed statement attached deleting  
inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b)

6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large  
table or Computer Program (*Appendix*)  
8. Nucleotide and/or Amino Acid Sequence Submission  
(*If applicable, all necessary*)  
a. ☐ Computer Readable Copy (CRF)  
b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies; or  
ii. ☐ Paper  
c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☒ Assignment Papers (cover sheet & document(s))

10. ☒ 37 C.F.R. 3.73(b) Submission

☒ Power of Attorney

11. ☐ English Translation Document (*if applicable*)

12. ☒ Information Disclosure Statement with copies of  
Citations as necessary

13. ☐ Preliminary Amendment Total Pages ☐

14. ☒ Return Receipt Postcard (*Should be specifically  
itemized*)

15. ☐ Certified Copy of Priority document(s) (*If foreign  
priority is claimed*)

16. ☐ Nonpublication Request under 35 U.S.C.  
122(b)(2)(B)(i). Application must attach form  
PTO/SB/35 or its equivalent

17. ☐ Other

21909 U.S. PTO  
10/631919  
07/31/03

18. If a **CONTINUING APPLICATION**, check appropriate box and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Division ☐ Continuation-in-part (CIP) of prior Application No.

Prior Application Information: Examiner  Group Art Unit

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

ATTY NAME  
AND REG. NO.

**Paul P. Kempf, Reg.  
No. 39,727**

SIGNATURE: 

ADDRESS

**Kinney & Lange, P.A.  
THE KINNEY & LANGE BUILDING  
312 South Third Street  
Minneapolis, MN 55415-1002**

TELEPHONE

**(612) 339-1863**

FAX: **(612) 339-6580**

FEE TRANSMITTAL		Complete if Known																																																																																																																																																
		Application No.																																																																																																																																																
		Filing Date	Herewith																																																																																																																																															
		First Named Inventor	Huazhou Lou et al.																																																																																																																																															
		Group Art Unit																																																																																																																																																
		Examiner Name																																																																																																																																																
Total Amount of Payment \$790.00		Atty. Docket Number	169.12-0592																																																																																																																																															
METHOD OF PAYMENT (Check One)		FEE CALCULATION (Continued)																																																																																																																																																
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fee required under 37 C.F.R. 1.16 and 1.17 and credit any over payments to Deposit Account <u>No.11-0982</u> . Deposit Account Name: Kinney & Lange, P.A. A duplicate copy of this communication is enclosed		<b>3. ADDITIONAL FEES</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee paid</th> </tr> </thead> <tbody> <tr><td>1051</td><td>130</td><td>2051</td><td>65</td><td>Surcharge - Late filing fee or oath</td><td>*</td></tr> <tr><td>1052</td><td>50</td><td>2052</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td>*</td></tr> <tr><td>1053</td><td>130</td><td>1053</td><td>130</td><td>Non-English specification</td><td>*</td></tr> <tr><td>1812</td><td>2,520</td><td>1812</td><td>2,520</td><td>For Filing a Request for Reexamination</td><td>*</td></tr> <tr><td>1251</td><td>110</td><td>2251</td><td>55</td><td>Extension for reply within first month</td><td>*</td></tr> <tr><td>1252</td><td>410</td><td>2252</td><td>205</td><td>Extension for reply within second month</td><td>*</td></tr> <tr><td>1253</td><td>930</td><td>2253</td><td>465</td><td>Extension for reply within third month</td><td>*</td></tr> <tr><td>1254</td><td>1,450</td><td>2254</td><td>725</td><td>Extension for reply within fourth month</td><td>*</td></tr> <tr><td>1255</td><td>1,970</td><td>2255</td><td>985</td><td>Extension for reply within fifth month</td><td>*</td></tr> <tr><td>1402</td><td>320</td><td>2402</td><td>160</td><td>Filing a brief in support of an appeal</td><td>*</td></tr> <tr><td>1403</td><td>280</td><td>2403</td><td>140</td><td>Request for oral hearing</td><td>*</td></tr> <tr><td>1814</td><td>110</td><td>2814</td><td>55</td><td>Terminal Disclaimer Fee</td><td>*</td></tr> <tr><td>1452</td><td>110</td><td>2452</td><td>55</td><td>Petition to revive - unavoidable</td><td>*</td></tr> <tr><td>1453</td><td>1,300</td><td>2453</td><td>650</td><td>Petition to revive - unintentional</td><td>*</td></tr> <tr><td>1501</td><td>1,300</td><td>2501</td><td>650</td><td>Utility/Reissue issue fee</td><td>*</td></tr> <tr><td>1502</td><td>470</td><td>2502</td><td>235</td><td>Design issue fee</td><td>*</td></tr> <tr><td>1460</td><td>130</td><td>1460</td><td>130</td><td>Petitions to the Commissioner</td><td>*</td></tr> <tr><td>1807</td><td>50</td><td>1807</td><td>50</td><td>Petitions related to provisional applications</td><td>*</td></tr> <tr><td>1806</td><td>180</td><td>1806</td><td>180</td><td>Submission of Information Disclosure Statement</td><td>*</td></tr> <tr><td>8021</td><td>40</td><td>8021</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td>40</td></tr> <tr><td>1801</td><td>750</td><td>2801</td><td>375</td><td>Request for Continued Examination (RCE)</td><td>*</td></tr> <tr><td colspan="5">Other fee (specify) _____</td><td>*</td></tr> <tr><td colspan="5" style="text-align: right;">Subtotal (3) \$40.00</td></tr> </tbody> </table>		Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee paid	1051	130	2051	65	Surcharge - Late filing fee or oath	*	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	*	1053	130	1053	130	Non-English specification	*	1812	2,520	1812	2,520	For Filing a Request for Reexamination	*	1251	110	2251	55	Extension for reply within first month	*	1252	410	2252	205	Extension for reply within second month	*	1253	930	2253	465	Extension for reply within third month	*	1254	1,450	2254	725	Extension for reply within fourth month	*	1255	1,970	2255	985	Extension for reply within fifth month	*	1402	320	2402	160	Filing a brief in support of an appeal	*	1403	280	2403	140	Request for oral hearing	*	1814	110	2814	55	Terminal Disclaimer Fee	*	1452	110	2452	55	Petition to revive - unavoidable	*	1453	1,300	2453	650	Petition to revive - unintentional	*	1501	1,300	2501	650	Utility/Reissue issue fee	*	1502	470	2502	235	Design issue fee	*	1460	130	1460	130	Petitions to the Commissioner	*	1807	50	1807	50	Petitions related to provisional applications	*	1806	180	1806	180	Submission of Information Disclosure Statement	*	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40	1801	750	2801	375	Request for Continued Examination (RCE)	*	Other fee (specify) _____					*	Subtotal (3) \$40.00				
Large Entity Fee Code	Large Entity Fee (\$)			Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee paid																																																																																																																																											
1051	130	2051	65	Surcharge - Late filing fee or oath	*																																																																																																																																													
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	*																																																																																																																																													
1053	130	1053	130	Non-English specification	*																																																																																																																																													
1812	2,520	1812	2,520	For Filing a Request for Reexamination	*																																																																																																																																													
1251	110	2251	55	Extension for reply within first month	*																																																																																																																																													
1252	410	2252	205	Extension for reply within second month	*																																																																																																																																													
1253	930	2253	465	Extension for reply within third month	*																																																																																																																																													
1254	1,450	2254	725	Extension for reply within fourth month	*																																																																																																																																													
1255	1,970	2255	985	Extension for reply within fifth month	*																																																																																																																																													
1402	320	2402	160	Filing a brief in support of an appeal	*																																																																																																																																													
1403	280	2403	140	Request for oral hearing	*																																																																																																																																													
1814	110	2814	55	Terminal Disclaimer Fee	*																																																																																																																																													
1452	110	2452	55	Petition to revive - unavoidable	*																																																																																																																																													
1453	1,300	2453	650	Petition to revive - unintentional	*																																																																																																																																													
1501	1,300	2501	650	Utility/Reissue issue fee	*																																																																																																																																													
1502	470	2502	235	Design issue fee	*																																																																																																																																													
1460	130	1460	130	Petitions to the Commissioner	*																																																																																																																																													
1807	50	1807	50	Petitions related to provisional applications	*																																																																																																																																													
1806	180	1806	180	Submission of Information Disclosure Statement	*																																																																																																																																													
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40																																																																																																																																													
1801	750	2801	375	Request for Continued Examination (RCE)	*																																																																																																																																													
Other fee (specify) _____					*																																																																																																																																													
Subtotal (3) \$40.00																																																																																																																																																		
2. <input checked="" type="checkbox"/> Check Enclosed																																																																																																																																																		
FEE CALCULATION																																																																																																																																																		
<b>1. BASIC FILING FEE</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> </tr> </thead> <tbody> <tr><td>1001</td><td>750</td><td>2001</td><td>375</td><td><input checked="" type="checkbox"/> Utility Filing Fee</td></tr> <tr><td>1006</td><td>330</td><td>2006</td><td>165</td><td><input type="checkbox"/> Design Filing Fee</td></tr> <tr><td>1004</td><td>750</td><td>2004</td><td>375</td><td><input type="checkbox"/> Reissue Filing Fee</td></tr> <tr><td>1005</td><td>160</td><td>2005</td><td>80</td><td><input type="checkbox"/> Prov. Filing Fee</td></tr> <tr><td colspan="5" style="text-align: right;">Subtotal (1) \$750.00</td></tr> </tbody> </table>		Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	1001	750	2001	375	<input checked="" type="checkbox"/> Utility Filing Fee	1006	330	2006	165	<input type="checkbox"/> Design Filing Fee	1004	750	2004	375	<input type="checkbox"/> Reissue Filing Fee	1005	160	2005	80	<input type="checkbox"/> Prov. Filing Fee	Subtotal (1) \$750.00																																																																																																																							
Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description																																																																																																																																														
1001	750	2001	375	<input checked="" type="checkbox"/> Utility Filing Fee																																																																																																																																														
1006	330	2006	165	<input type="checkbox"/> Design Filing Fee																																																																																																																																														
1004	750	2004	375	<input type="checkbox"/> Reissue Filing Fee																																																																																																																																														
1005	160	2005	80	<input type="checkbox"/> Prov. Filing Fee																																																																																																																																														
Subtotal (1) \$750.00																																																																																																																																																		
<b>2. EXTRA CLAIM FEES</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Number Claims</th> <th>Prior**</th> <th>Extra</th> <th>Fee from Below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>Total</td> <td>19</td> <td>-</td> <td>20</td> <td>= 0 x 0 = 0</td> <td></td> </tr> <tr> <td>Indep.</td> <td>3</td> <td>-</td> <td>3</td> <td>= 0 x 0 = 0</td> <td></td> </tr> <tr> <td>Multiple Dependent Claims</td> <td></td> <td></td> <td></td> <td>* = *</td> <td></td> </tr> </tbody> </table> <p>**Insert 3 and 20, or number previously paid if greater; Reissue see below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Small Entity Fee (\$)</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1202</td><td>18</td><td>2202</td><td>9</td><td>Claims in excess of 20</td></tr> <tr><td>1201</td><td>84</td><td>2201</td><td>42</td><td>Independent claims in excess of 3</td></tr> <tr><td>1203</td><td>280</td><td>2203</td><td>140</td><td>Multiple Dependent Claim</td></tr> <tr><td>1204</td><td>84</td><td>2204</td><td>42</td><td>Reissue Independent Claims Over Original Patent</td></tr> <tr><td>1205</td><td>18</td><td>2205</td><td>9</td><td>Reissue claims in excess of 20 and over original patent</td></tr> <tr><td colspan="5" style="text-align: right;">Subtotal (2) \$00.00</td></tr> </tbody> </table>			Number Claims	Prior**	Extra	Fee from Below	Fee Paid	Total	19	-	20	= 0 x 0 = 0		Indep.	3	-	3	= 0 x 0 = 0		Multiple Dependent Claims				* = *		Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Description	1202	18	2202	9	Claims in excess of 20	1201	84	2201	42	Independent claims in excess of 3	1203	280	2203	140	Multiple Dependent Claim	1204	84	2204	42	Reissue Independent Claims Over Original Patent	1205	18	2205	9	Reissue claims in excess of 20 and over original patent	Subtotal (2) \$00.00																																																																																										
	Number Claims	Prior**	Extra	Fee from Below	Fee Paid																																																																																																																																													
Total	19	-	20	= 0 x 0 = 0																																																																																																																																														
Indep.	3	-	3	= 0 x 0 = 0																																																																																																																																														
Multiple Dependent Claims				* = *																																																																																																																																														
Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Description																																																																																																																																														
1202	18	2202	9	Claims in excess of 20																																																																																																																																														
1201	84	2201	42	Independent claims in excess of 3																																																																																																																																														
1203	280	2203	140	Multiple Dependent Claim																																																																																																																																														
1204	84	2204	42	Reissue Independent Claims Over Original Patent																																																																																																																																														
1205	18	2205	9	Reissue claims in excess of 20 and over original patent																																																																																																																																														
Subtotal (2) \$00.00																																																																																																																																																		

Signature Paul P. Kempf Reg. No. 39,727

Date 7/31/03 Deposit Account No. 11-0982